

AMENDMENTS TO THE SPECIFICATION

Please amend paragraphs [0023], [0026], [0035]-[0037], [0045], and [0058] as indicated below. Applicant is submitting herewith replacement paragraphs without markups.

[0023] With reference to the figures, a variable shear line lock cylinder 10 is provided and includes an outer cylinder 12, an inner cylinder 14, a plurality of pin assemblies 16, a lock assembly 18, and actuation mechanism 20. The outer cylinder 12 rotatably receives the inner cylinder 14 while the pin assemblies 16 are disposed therebetween. The pin assemblies 16 are operable to selectively prevent rotation of the inner cylinder ~~12~~ 14 relative to the outer cylinder ~~14~~ and are positionable relative to the inner and outer cylinders ~~12, 14~~ 14-12 through engagement with the lock assembly 18. In addition, the actuation mechanism 20 interacts with the pin assemblies 16 and is operable to allow rotation of the inner cylinder ~~12~~ 14 relative to the outer cylinder ~~14~~ 12, as will be discussed further below.

[0026] The inner cylinder 14 is rotatably received by the bore ~~[[44]]~~ 32 of the outer cylinder 12 and includes a central bore 50, an arcuate outer surface 52, and an axis of rotation 54. The axis of rotation 54 of the inner cylinder 14 is formed generally coaxially with the longitudinal axis 34 of the outer cylinder 12, such that the inner cylinder ~~12~~ 14 is received generally at a central point of the bore ~~[[44]]~~ 32. In this manner, a recess 56 is formed between the outer surface 52 of the inner cylinder 14 and the inner surface 36 of the outer cylinder 12, as best shown in FIG. 3.

[0035] The lock assembly 18 is operable to fixedly hold the upper and lower shear cylinders 72, 74 relative to the outer and inner cylinders 12, 14. The lock assembly 18 includes an upper lock rack 136, a lower lock rack 138, an upper lock pin 140, and a lower lock pin 142. The upper lock rack 136 is fixed to the outer cylinder ~~18~~ 12 and includes a plurality of locking recesses 144 while the lower lock rack 138 similarly includes a plurality of locking recesses 146 and is fixedly attached to the inner cylinder 14.

[0036] The upper lock pin ~~136~~ 140 is an elongate cylindrical member and is operable to be slidably received by the lock bore 96, formed in the upper shear cylinder 72. In addition, the upper lock pin ~~136~~ 140 includes a lock post 148 integrally formed therewith for interaction with the upper lock rack 136. Specifically, the lock post 148 is formed generally perpendicular to the upper lock pin ~~136~~ 140 and is operable to matingly engage the locking recesses 144 formed in the upper lock rack 136 as the lock pin ~~136~~ 140 translates within the lock bore 96.

[0037] The lower lock pin ~~138~~ 142 is an elongate cylindrical member and is operable to be slidably received by the lock bore 118, formed in the lower shear cylinder 74. In addition, the lower lock pin ~~138~~ 142 includes a lock post 150 integrally formed therewith for interaction with the lower lock rack 138. Specifically, the lock post 150 is formed generally perpendicular to the lower lock pin ~~138~~ 142 and is operable to matingly engage the locking recesses 146 formed in the lower lock rack 138 as the lock pin ~~138~~ 142 translates within the lock bore 118.

[0045] With reference to the figures, the operation of the lock cylinder 10 will be described in detail. The lock cylinder 10 is shown incorporated into a door

assembly 200 having a door 202, a handle 204, and a latch bolt 206, as shown in FIG. 10. The lock cylinder 10 is operable to permit or restrict rotation of the handle 204 relative to the door 202 to selectively lock the door 202 relative to a doorframe 208. Specifically, as the door handle 204 is permitted to rotate, the latch bolt 206 may be selectively retracted from engagement with a latch plate 210 disposed on the doorframe 208. As can be appreciated, as the latch bolt 206 is retracted from engagement with the latch plate 210, the door 202 is permitted to rotate relative to the door frame 208 and when the latch bolt 206 is extended, and engaged with the latch plate ~~208~~ 210, the door is restricted from rotating relative to the door frame 208. In this regard, the lock cylinder 10 is operable to selectively permit or restrict rotation of the door 202 relative to the doorframe 208 by selectively permitting and restricting rotation of the door handle 204.

[0058] Once the new key 222 is inserted into the key recess 134, the lock pins 140, 142 are disengaged from the upper and lower pins 76, 78 and re-engage with the respective upper and lower lock racks 136, 138 to fixedly position the upper shear cylinder ~~73~~ 72 relative to the outer cylinder 12 and fixedly position the lower shear cylinder 74 relative to the inner cylinder 14. Once the upper lock pin 140 is received by a locking recess 144 of the upper lock rack 136 and the lower lock pin 142 is received by a locking recess 146 of the lower lock rack 138, the new key 222 may be removed. At this point, the new key 222 will be operable to lock and unlock the lock cylinder 10 while the old key 212 will no longer function to do so.